

## WATER DECOMPOSING SUBSTANCE AND DECOMPOSING METHOD FOR WATER

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### Abstract

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**PURPOSE:** To obtain a water decomposing substance capable of producing hydrogen by decomposing water safely and efficiently, by adding a Ti-base catalytic metal to amalgam consisting of a metal selected from Zn, Pb, Sn and Al, Hg and an alkali metal.

**CONSTITUTION:** A metal selected from Zn, Pb, Sn and Al, Hg and an alkali metal such as K are mixed and heated to prepare amalgam. This amalgam is blended with a mixture or an alloy of Ti with a metal selected from Co, Ni, Fe, Cu, Mn, Mo, W, Si, V, Pd and Pt to obtain the desired water decomposing substance. In the catalytic reaction of the water decomposing substance with water, the amalgam reacts with the water, generating hydrogen. By the action of the Ti-base catalytic metal the water decomposing power of the amalgam is remarkably increased.

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